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(FOUO 4/80)

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JPRS L/9184

8 July 1980

Worldwide Report

LAW OF THE SEA

(FOUO 4/80)

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WORLDWIDE REPORT

LAW OF THE SEA

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WORLDWIDE AFFAIRS

JAPAN'S PAPERS COMMENT ON SALMON TALKS, ACCORD WITH USSR

'ASAHI SHIMBUN' Comment

OWI/1015 Tokyo ASAHI EVENING NEWS in English 16 Apr p 7--FOR OFFICIAL USE ONLY

[ASAHI SHIMBUN 15 April editorial: "Salmon Fishery Talks"]

[Excerpts] The recent negotiations between Japan and the Soviet Union to decide the Japanese catches of salmon and salmon-trout in the northwestern Pacific this summer ended in a settlement after only 12 days--very different from the days when the negotiations dragged on for 100 days, even until after May 1, the day the fishing season opens.

Despite the fact that this year is a lean year for salmon-trout, Japan secured a quota of 42,500 tons.

All the details, such as the areas for operation and the fishing season, remain the same as last year, and Japan also was able to prevent any reduction in the number of fishing boats allowed to operate in the northern waters, which was its principal aim in the negotiations. But the fishing cooperation fees which Japan will pay the Russians come to 3,750 million yen, 500 million yen more than last year.

In recent talks, the Russians did not stick too strongly to their avowed principle of banning fishing in waters off the Soviet Union, and the question of expanding the no-fishing zone did not become an issue this year. Instead, the negotiations were wholly concerned with the catch quota and the fishing cooperation fees. The principle of Japan's being permitted to catch salmon and salmon-trout if it pays money has become established.

Thus, the Japan-Soviet fishery negotiations, which, as the only governmental-level talks between Japan and the Soviet Union, sensitively reflected the prevailing international situation and served as an indicator of Moscow's policies toward Japan, have been transformed into practical economic talks. Because the Russians unilaterally delayed the start of the negotiations, there was some concern as to how matters would go since it was felt that the Russian decision was taken out of political motives. Fortunately, these apprehensions have proved to be groundless.

The fact that three years have passed since the Japan-Soviet fishery cooperation agreement--which was concluded to cope with the age of 200-mile limits--came into effect does not warrant optimism. Nevertheless, a broad framework of agreement concerning salmon and

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Salmon-trout fishing in the northern waters has somehow begun to take shape. But the industry faces an economic crisis. The substantial increase in fishing cooperation expense, together with soaring fuel costs and the low prices of salmon and salmon-trout, may result in a deficit.

As a consequence of better methods of artificially incubating salmon and salmon-trout and discharging them into rivers, catches in rivers in this country last year amounted to 86,000 tons. Imports from other countries, such as Canada and the U.S., are now close to 55,000 tons. With stocks said to be in excess of 60,000 tons, salmon and salmon-trout which have been kept in warehouses for two or three years are being dumped. This shows that catches in the northern waters are no longer the principal factor influencing market prices.

In the circumstances, the industry is expected to seek an increase in the percentage of the fishing cooperation fees shouldered by the government last year, the government bore 45 percent of these fees). But it remains to be seen whether the people will agree to this. The fishing industry is likely to be urged to make additional efforts and to reorganize itself. The industry should certainly not be permitted to ignore the controls on fishing operations on the pretext of difficult economic conditions. The age has come in which the people should keep a critical eye on the catching of salmon and salmon-trout in the northern waters.

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'MAINICHI' Comment

OW171017 Tokyo MAINICHI DAILY NEWS in English 16 Apr 80 p 2--FOR OFFICIAL USE ONLY

[Editorial: "Salmon Fishing at Turning Point"]

[Excerpts] In unusually swift negotiations lasting only 12 days, Japan and the Soviet Union agreed in Moscow Sunday to set Japan's 1980 salmon catch quota in northwest Pacific waters at 42,500 tons, unchanged from the past two years.

It took almost 20 days before the two countries could reach a salmon fishing accord last year.

Three primary factors loom behind the two nations' reaching the speedy agreement: An accord which allows each to conduct fishing operations in the other country's waters in the age [as received] of "200 nautical-mile waters" has increased their dependence on each other's fishery resources; the stabilized salmon catch for Japan and the cooperation fee Japan pays to the Soviet Union have now become part of Soviet fishery practices; and Moscow might have taken into account the anti-Soviet sentiment in Japan caused by the Soviet troops' invasion of Afghanistan.

A question now arises as to the wisdom of continuing to catch salmon in Soviet waters, considering the steadily rising fee payments.

The salmon haul in domestic waters rose to 86,000 tons last year--the highest on record--due to strenuous efforts made by both the government and the private sector to increase resources. And with the salmon resources in waters off Alaska and Canada improving, Japan imported 55,000 tons of salmon last year. The quantity, it appears, could easily increase if Japan intends to import more.

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When Japan-Soviet fishery negotiations started in 1956, Japan acutely needed to continue its salmon fishing operations in the northwest Pacific in line with the country's efforts to secure protein for its people and to earn foreign currencies through exports of canned salmon.

However, currently, Japan has larger stocks of salmon, including imports, than it needs, and dumping has begun to appear in domestic sales. Also, exports do not have the economic significance they once had.

The biggest question Japan now faces with respect to the salmon catch in the northwest Pacific is how to reduce the number of fishermen engaged in that endeavor, if Japan ever decides to scale it down. Their number now stands at 8,000, compared with 30,000 at the height of the operations.

It may not be a hard task to persuade some of them to go after other kinds of fish under an annual plan. It may be high time for Japan to reconsider its ocean-going fishery operations as the supply and prices of fuel oil have become increasingly uncertain.

An attempt to scale down the north Pacific's salmon fishing operations, which have a history of nearly a century, is likely to meet with strong opposition from the fishermen. But the importance of those operations, once considered to be vital to this nation's interests, is diminishing. Further, from a diplomatic standpoint, it may not be wise to owe a favor to the Soviet Union because of the salmon fishing.

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'YOMIURI' Comment

OW180502 Tokyo THE DAILY YOMIURI in English 16 Apr 80 p 2--FOR OFFICIAL USE ONLY

[Editorial: "Fish Not Worth Price"]

[Text] The Soviet Union did itself and not particularly Japan a favor in setting the salmon catch at 42,500 tons for the third straight year. [sentence as published]

The fishery cooperation fee, which Japan must pay the Soviet Union, was raised by yen 500 million to yen 3,750 million. And of this amount, the government will bear 50 percent of the cost. This raises the question of whether salmon fishing in the northern Pacific is so important that it needs to be subsidized.

USSR Stands To Profit

Salmon fishing operations in the northern Pacific are, however, very profitable for the Soviet Union because it can foster its salmon resources by giving Japan a small share of the catch. The Soviet Union stands to lose in its salmon agreements with Japan if it gives Japan such a small quota that Japan cuts its ship tonnage in this operation.

In 1978, the Soviet Union slashed the quota from 62,000 to 42,500 tons and this forced Japan to reduce its ship tonnage. Also, the compensation paid to ship owners forced out of the northern Pacific fishery grounds was so attractive that many voluntarily withdrew.

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Obviously, if the quota is reduced too much, the northern Pacific salmon fishing business will wane. And this evidently would be detrimental to the Soviet Union, which wants the Japanese fees. Because of this, the Soviet Union has not lowered the quota in three years.

The Soviet Union in this year's negotiations proceeded in a cool and calculating manner. There was no indication that the Soviet Union was being kind to Japan because it wanted to improve its image, which was damaged by the Afghanistan invasion.

Is It Worth the Cost?

But just how important is the 42,500 tons of salmon caught in the northern Pacific to Japan? This represents only a small fraction of Japan's total fish catch of 10 million tons a year. Moreover, Japan's pattern of fishing is changing. Last year, 85,000 tons of salmon came from Japan's coastal waters and 54,000 tons from the U.S. and Canada. It also should be taken into consideration that salmon on the market are in excessive supply.

It must be concluded that northern Pacific salmon have lost their importance, and most certainly the fee charged by the Soviet Union is too high. Each year, the Soviet Union raises its fees, and consequently government subsidies go up each year.

This is a waste of tax money, particularly at a time when public finances are in so much trouble. Considering the slack demand for salmon, fishermen also stand to lose money and should realize the changes in salmon supply and consumption.

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INTER-ASIAN AFFAIRS

'NIHON KEIZAI SHIMBUN': SRV HALTS BID FOR JAPAN OIL PROJECT

OW151031 Tokyo NIHON KEIZAI SHIMBUN in Japanese 14 May 80 Morning Edition p 4

[Text] It was learned on 13 May that the Vietnamese Government had given up its plan to obtain technical cooperation from Japan in an oil development project off the Vietnam coast, replacing it with cooperation from the Soviet Union and other CEMA (the communist bloc's Council on Economic Mutual Assistance) nations. The area is regarded as a potential oil area and a most promising one in the Far East--only next in potential to a similar area in China.

Negotiations on Japan's cooperation in the Vietnamese project were suspended when the China-Vietnam conflict broke out in February last year. After that, according to a source connected with trade with Vietnam, the Vietnamese authorities asked CEMA countries for their technical cooperation and at the same time decided "not to actively solicit technical cooperation" from Japan and other Western nations. Thus, in the wake of the China-Vietnam conflict, the possibility of Japan's cooperation seems to have been eliminated.

This development was made clear by a responsible official in the Vietnamese Government to a representative (Mitsuboshi Nakahara, managing director) of the Japan-Vietnam Trade Association--which acts as a liaison in Japan-Vietnam trade--who recently visited Vietnam. According to the official, the prospecting work by Soviet engineers has already entered the stage of preparation for regular production. Crude oil shipments, including exports, may begin as early as sometime in the latter half of 1982.

The Vietnamese Government regards oil development as one of the most important parts of its economic program and conducts prospecting work in the Gulf of Tonkin and in the Mekong River estuary. In the latter project in particular, West Germany, Italy and Canada are engaged in prospecting operations in six zones--two zones each. The size of the deposits has yet to be confirmed but oil samples obtained from the explorations were of relatively light type and good quality. Japan's participation in the project off Vietnam's coast was about to materialize when the China-Vietnam conflict occurred. The Tokyo-based Nihon Kaiyo Kaihatsu, together with a French company, was to apply for drilling zones, while the petroleum development corporation and the Vietnamese Government's General Bureau of Petroleum and Gas were conducting negotiations on refining operations in Vietnam and on Japan's share in them.

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- However, the Petroleum Development Corporation, which had been rendering technical cooperation
- to similar Chinese projects in Bohai Bay and along the Eastern Chinese coast, began showing
less enthusiasm for the Vietnamese project as Sino-Vietnamese relations deteriorated. Mean-
while, Japanese firms repeatedly asked for Japan's cooperation. On the other hand, the devel-
opments in Afghanistan put the United States and the USSR in open confrontation with each
other, causing Japan to hesitate even more to give Vietnam technical cooperation. According
to the same source, the Vietnamese official disclosed that while allowing West Germany, Italy
and Canada to carry on their current projects, Vietnam will in the future no longer seek tech-
nical cooperation from Western nations.

- Meanwhile, the Soviet Union has come forward with massive economic aid to support the
Vietnamese economy which had been considerably exhausted by the troop dispatch to Kampuchea.
Soviet technical cooperation in the oil project off the Vietnamese coast suggests that
Soviet-Vietnam cooperation is quickly expanding and strengthening in the energy field. In
the past, the Soviet Union confined its cooperation to oil and natural gas development pro-
jects in inland areas, while staying away from offshore projects. The Petroleum Development
Corporation reacted calmly to the news of the Vietnamese move as it had been avoiding direct
contact with Vietnam since the China-Vietnam conflict last year, being of the view "the
international situation does not allow our country to cooperate with Vietnam in the develop-
ment of oil, a most important strategic material."

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JOINT ROK-JAPAN OIL TEST DRILLING BEGINS IN EAST CHINA SEA

OW071517 Tokyo JIJI in English 1402 GMT 7 May 80

[Text] Tokyo, May 7 (JIJI Press)--Japan Oil Development Co., a wholly-owned subsidiary of Nippon Oil Co., started Tuesday test drilling at the No. 5 concession on the continental shelf lying between Japan and South Korea under the two nations' oil development [as received] announced Wednesday.

The accord, signed in January 1974, calls for the two countries to develop oil and natural gas in an 82,000-square-kilometer area in the East China Sea, which consists of nine concessions. Japan Oil Development takes charge of prospecting and test drilling in five concessions--that is, from No. 2 to No. 6.

The reserves of crude oil and natural gas in the continental shelf are estimated at 300 million kiloliters in terms of crude oil. Output will be equally shared by the two countries.

Tuesday afternoon, Nippon Oil said, the oil rig No. 3 Hakuryu (White Dragon) began test boring a 95-meter-deep seabed about 300 kilometers south of the Korean island of Cheju. It will test drill to the depth of 3,500 meters under the ocean floor.

Japan Oil Development plans to complete exploratory boring by the end of July and analyze data to confirm the natural gas and oil reserves. If things go well, the firm said, it could start production in 1985.

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BRIEFS

JAPANESE, NEW ZEALAND FISHERMEN TALKS--Tokyo, May 13 (JIJI PRESS)--Japanese and New Zealand fishermen will hold talks in Wellington Wednesday and Thursday on Japan's fishing operations in that country's 200-mile zone and fishery cooperation between the two nations. The meeting, the first private-level fishery talks between the two countries, is aimed at facilitating inter-governmental fishery negotiations through a frank exchange of views. Japan will be represented by a six-member delegation, led by Executive Director Teruo Sasaki of the Japan Fisheries Association. Taking part from the New Zealand side are 10 ranking members of the Fishery Industry Board (FIB). Regarding Japanese fishing operations in New Zealand's 200-mile zone, Japan will propose expanded fishing areas for Japanese trawlers and a relaxation of the procedures for Japanese fishermen to pay fishing fees to New Zealand to enter the waters. It will also ask New Zealand to see to it that the number of Japanese cuttlefish boats will not decrease due to fishing controls. New Zealand is expected to seek Japan's cooperation in breeding projects for salmon and scallop. [Text] [OW131513 Tokyo JIJI in English 1439 GMT 13 May 80]

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JAPAN

GOVERNMENT CONSIDERS NON-NUCLEAR POLICY IN 200-MILE ZONE

OW120919 Tokyo ASAHI EVENING NEWS in English 10 May 80 p 3

[Text] The government feels that the three non-nuclear principles should not be enforced in Japan's 200-mile economic zone when the latter is endorsed by the new sea law treaty, according to foreign office sources here on Thursday night.

As reason for not enforcing the principles, the sources listed the following:

1. The three non-nuclear principles--non-manufacture, non-entry and non-possession of nuclear weapons--apply only in Japanese territory;
2. The economic zone, under which sovereign rights over marine life and natural resources are recognized, are not territorial waters; and
3. Since the maintenance of the three non-nuclear principles is the policy only of Japan, it will be difficult to enforce them on a wider scale.

The Gaimusho sources made the disclosure in order to correct a reply made by Parliamentary Vice-Minister for Foreign Affairs Juro Matsumoto to an interpellation by Ms. Takako Doi, a Japan Socialist Party member, in Thursday's session of the lower house Foreign Affairs Committee.

Matsumoto told the committee that Japan would like to enforce the three non-nuclear principles in the economic zone. He added that Ms. Doi probably was aware that Japan's wish was known abroad.

Because the time was up, the questions and answers were concluded, giving the impression that the government intended to enforce the principles in the economic zone.

Later, when asked by foreign office leaders, Matsumoto said that he had wanted to say that although Japan wanted to apply the principles, this would be difficult in international law.

The enforcement of the principles in the economic zone would mean that prior consultations would have to be held if the U.S. Navy wanted ships carrying nuclear arms to enter Japan's 200-mile zone, and this might affect the security setup between Japan and the U.S.

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INTER-ARAB AFFAIRS

LIBYAN-TUNISIAN CLAIMS TO GABES GULF DISCUSSED

Paris JEUNE-AFRIQUE in French 28 May 80 p 51

[Article by Mohamed Habib Ladjimi, Tunisian jurist and journalist: "The Gulf of Gabes: What Can the ICJ Do?"]

[Text] Since the Mummar al-Qhadhdhafi coup d'etat (1 September 1969) and, in particular, since the stillborn Jerba union (12 January 1974), relations between Tunisia and Libya have been somewhat rocky. The failure of that union even gave rise to a series of "disputes," the most serious of which was the Gafsa "coup" on 27 January 1980 and the most controversial was the "continental shelf affair," in the Gulf of Gabes. Each of the two states claims sovereignty over this maritime zone which is rich with oil. Diplomacy having failed, the two countries took the matter to the International Court of Justice (ICJ) which is located in The Hague (Netherlands). After the judgment (judicial decision) is rendered, which is to take place on 29 May, we will attempt a theoretical analysis, then several forecasts with respect to the Court's decision and the problems which might be engendered by its application.

A Complex Delimitation

First, what is a continental shelf? The definition of the Geneva Convention on the Law of the Sea (1958) is not conspicuous for its clarity: "the seabed and the subsoil of the submarine regions adjacent to the coasts but situated outside the territorial sea, to a depth of 200 meters or, beyond this limit, to a point where the depth of the overlying waters permits exploitation of the natural resources of said regions." With this new criterion of "exploitability," the Geneva Convention made the delimitation of the continental shelf even more complex and, because of this fact, became the generator of conflicts. Let us hope that the next session of the United Nations devoted to the law of the sea, which will be held in Geneva at the end of July, will find a better definition for this concept whose origin goes back to the proclamation by the American President Harry Truman (28 September 1945).

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The Cannon's Range...

Therefore, with Tunisia and Libya, we are in the presence of two neighboring states which are quarreling over a common continental shelf. Article 6 of the Geneva Convention (which is still in effect, although nearly suffering from old age) in such cases provides the rule of equidistance. President Truman's doctrine gave preference to interstate agreements. As for the ICJ, it established a precedent with its judicial decision on 20 February 1969 in the matter of the North Sea continental shelf by introducing the concept of "pertinent circumstances." The Court thereby intended to establish three new criteria: "general configuration of the coasts," "maritime facade" and "unity of deposit." This did not prevent the ICJ from enriching its jurisprudence on the occasion of the Tunisian-Libyan disagreement by taking into consideration particularly the multiple efforts of the United Nations Law of the Sea Conference. Be that as it may, the 29 May decision can only come within the framework of three hypotheses:

1. The ICJ accredits the Libyan position. In this case, we think that the matter is closed, since Tunisia has committed itself to conforming to international justice. Dare we hope, for the peace of the region, that the judges at The Hague will render a decision to this effect?
2. The ICJ renders a judgment of Solomon, as it did for the Western Sahara in 1975. This "solution" would make the situation even more difficult. The status quo being clearly favorable to Libya, which has installed a drilling platform in the zone under contention, only the balance of power could "manage the crisis." Then there would be the risk of returning to the 18th century, when the width of the territorial sea was determined by the range of the riparian state's cannon.

Romanticism?

3. The decision is favorable to Tunisia. We would be tempted to add: "on paper." For, in the present state of affairs, we cannot envision Libya's conforming to such a decision without protesting. Of course, the decisions of the ICJ are mandatory and become the "authority of the thing judged" vis-a-vis the parties. But what can the ICJ do to a state which refuses to comply? Article 94 of the UN Charter stipulates: "If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment." It is pointless to add that the good intentions of the writers of the Charter are as romantic in 1980 as they were in 1945...

Therefore, there are two chances out of three that the outcome will be favorable to Libya and only one chance that the Court's decision will contribute to the "easing of tensions" [decrispation] between the two countries.

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DISCUSSION OF DEVELOPMENT OF CONTINENTAL SHELF

Leningrad IZVESTIYA VESESOYUZNOGO GEOGRAFICHESKOGO OBSHCHESTVA in Russian
No 1, Jan-Feb 80 pp 40-45

[Article by V. A. Dergachev: "Natural and Economic Contact Zone -- 'Dry Land and Ocean'"]

[Text] Economic assimilation of the resources of the world ocean is one of the global problems of modernity. The Soviet Union devotes a great deal of attention to comprehensive research on the ocean, which requires the co-operation of oceanologists, economists, geographers, mathematicians, physicists, biologists, chemists and other specialists. It is precisely the areas in which various branches overlap that provide a fruitful basis for new scientific ideas.

The economic assimilation of the ocean means, above all, man's assimilation of the resources of the continental shelf. Therefore it is no accident that, along with economic problems of the world ocean, an important position is occupied by comprehensive study and assimilation of the shelves. Unfortunately, as a corresponding member of the USSR Academy of Sciences, A. F. Treshnikov [25] notes, in domestic and foreign literature there is still not enough research that contains a comprehensive analysis of the process of assimilating the continental shelf.

The assimilation of the shelf is considered in isolation in many cases, without taking into account the development of productive forces in the coastal regions, and vice versa. But from the standpoint of comprehensive investigations of the ocean, these problems must be studied in their unity and their interconnection.

According to the idea of active surfaces, the geographic structure of the ocean is circumferential. Its active areas, which are characterized by a wealth of life and by the intensiveness of natural processes, comprises only two percent of its volume [1, 9]. Among the main contact zones, one can single out a) the coastal zone "sea-shore" including as one of the forms of interaction between sea and land the contact system "sea-river," b) the surface of the sea--the atmosphere, c) "frontal zones" (junctions of various

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masses of water, d) the bottom layer of the water--the surface of the sea bottom [7]. The contact zones and the main surfaces of the division are considered more completely in the works of A. D. Dobrovol'skiy, V. L. Lebedev, T. A. Ayzatullin and others [1, 9, 10].

In natural sciences the natural contact zone of "dry land--ocean" has been recognized to play an outstanding role, as the zone with the most intensive chemical interactions [5]. The origin of life is related to the coastal zone of the ocean [4]. The overwhelming majority of minerals of a sedimentary origin were formed in the contact zone of "dry land--ocean" in past geological ages as a result of a large excess of organic substance. Ocean and sea sedimentary deposits, which include all combustibles (petroleum, natural gas, coal, combustible slate) are acquiring great industrial significance and are a most important reserve for the fuel and energy resources of the earth.

While man was able to accomplish the industrial revolution because of the utilization of combustible minerals from the earth which were formed in the process of sedimentation, to bring the combustible mineral from the shelf into economic circulation will contribute to further progress of the world economy. At the present time, as continental deposits of petroleum and gas become exhausted, their extraction is localized to a greater degree on the shelf, where the largest petroleum- and gas-bearing deposits are concentrated. Because of the economic attraction of the coastal zone, ocean and sea sedimentary deposits are becoming more and more significant as construction materials (sand, gravel, clay, lime, chalk).

The scientific fundamentals of the ten-year program for research into the world ocean which was developed by the National Committee of Soviet Oceanographers at the end of the 1960's emphasized: "the processes of development of the coastal zone of the seas and oceans are so specific that they cause us to consider it as a special border area which is qualitatively distinct from the masses of dry land and the oceanic water areas it shares ([11], p 797). In ecology this has been reflected in the concept of the ecotone and the idea of the edge (border) effect. From an ecological standpoint the natural contact zone of "dry land--ocean" is the border zone of "tension" in which one observes a tendency towards increased diversity and density of communities. The most typical example is provided by estuaries which can be seen as transitional impulse-stabilizing zones between the inhabitants of fresh and salt water [19]. A large part of the initial output of the ocean is concentrated in the coastal zone and in tidelands areas.

Geomorphology contains the fundamentals of the study of the development of sea coast, including the coastal zone of the seas of the USSR [12, 13, 14, 15, 17, 18] and earmarks certain ways of optimizing the anthropogenic influence on the coastal zone [23].

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An analysis of the differentiation of the economic assimilation various water areas of the world ocean [8] makes it possible to single out the following economic and geographical zones of the ocean, taking into account the natural differentiation of the water areas and the international legal conditions: the natural economic contact zone of "dry land--ocean" including its oceanic constituent--the continental shelf; and the zone of open ocean and the island zone.

The natural economic contact zone of "dry land--ocean" (PKhKZ) is a zone of intensive interaction of population, economy, and the natural environment; it is a border zone of interaction of territorial-production and water area-production structures of dry land and ocean. Its current condition is characterized by an increase in the density of coastal population and the diversity of economic activity as well as deterioration of the condition of the natural environment.

The PKhKZ includes the continental shelf and the economic coastal zone. Its area comprises approximately 7 percent of the earth's surface and the length of the coastline is more than 1.5 million kilometers.

The continental shelf is the level part of the underwater edge of the continent (hence its other name--the continental bank). The outlying continental position of the shelf is clearly visible from relief maps of the bottom of the world ocean. The overall area of the shelf is 31 million square kilometers or 7.5 percent of the overall surface of the bottom of the ocean. Its average depth (130 meters) contributes to intensification of the utilization of potential supplies contained in it in the near future. The shelf is characterized by a geological structure that it shares in common with dry land which also gives justification for considering it in conjunction with the coastal area in a unified system of the PKhKZ.

The continental shelf has been and still is the main fishing region. The most productive areas of the world ocean are concentrated here. The spawning places of the majority of kinds of fish are concentrated in the shallow-water (neritic) part of the shelf. At the present time 19 percent of the world's petroleum extraction and 20 percent of the extraction of natural gas take place on the shelf. Numerous prognoses indicate that there will be a future increase in the proportion of "sea" petroleum and gas.

The natural coastal zone or the sea coast is a strip where there is interaction between the dry land and the sea. At the basis of its natural differentiation are various types of coast: fjords, scarries, estuaries, rias, the Dalmatian coast, deltas and so forth. No all of the coastal zone has been economically assimilated by man yet but even in Anarctica it has been subjected to man's influence as a result of the pollution of the hydrosphere and atmosphere. The breadth of the economic coastal zone is determined by the territorial-production structure of maritime business and depends on the relief and the type of seashores.

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PKhKZ is characterized by exceptional diversity. Therefore it is necessary to investigate the interactions between its natural (oceanographic, geological, biological, ecological and so forth) and socio-economic peculiarities.

Recently they have begun to point out more and more frequently the socio-economic attraction of the ocean coasts [2, 3, 16, 20, 21, 22, 24, 26, 27, 29, 31]. Attention is drawn to the industrial "shift" toward the ocean and the formation of large port industrial complexes. The PKhKZ is the main arena for the development of the productive forces of the maritime economy. Here are located the branches of industry that are directly related to the utilization of the natural resource potential of the seas and oceans.

The industrial "shift" toward the ocean in economically developed capitalist countries is taking place not only because of the scientific and technical revolution in maritime transportation, but also as a result of the increased dependency on imports of raw material and fuel from developing countries. In turn, the development of ports has increased the attraction to the coasts of industry that is based on processing of imported petroleum, rock coal and iron ore [16].

Of great significance in the PKhKZ is the utilization of power from waves and tides, the construction of atomic electric power stations and installations for obtaining fresh water from sea water. In the PKhKZ maritime transportation works together with rail, automotive and river transportation. Of special importance for transportation contacts are the mouths of shipping rivers where large industrial port complexes are frequently formed. The PKhKZ is the arena for increasing the industrial productivity of the oceans and seas through cultivating, raising and acclimatizing sea kinds of fish, invertebrates and algae.

The research of Polish and American demographers shows that man is essentially not a continental but a coastal inhabitant. According to data of 1961, 27.6 percent of the earth's population lives in the strip of land extending 50 kilometers from the shores of the world ocean and seas that enter into it. More than half of all humans (50.3 percent) live in the coastal strip of not more than 200 kilometers from the seas and oceans [30].

According to data of the Massachusetts Institute of Technology (United States), at the beginning of the 1970's 53 percent of the earth's population was already concentrated within 80 kilometers of the sea coastline. By the year 2000 80 percent of the population of the United States will live in this territory [29]. In 1970 89 million people lived in the coastal zone of the United States (including the Great Lakes). The population in the coastal territories is growing more rapidly than the average for the country: during 1960-1970 it increased in the coastal counties by 27 percent and in the cities located within 2 kilometers of the coastal zone--by 47 percent [28].

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The PKhKZ is the largest recreation area on earth. Because of the natural conditions on the coast and the properties of sea water, sea resorts have become widely developed. Numerous cultural-historical and natural monuments on the coast make it possible to combine recreation with sea tourism and they increase the aesthetic attraction of the contact zone.

The socio-economic attraction of ocean and sea coast is explained by the increased role of international division of labor and the expansion of export-import ties among countries, the increased scale of economic activity in the ocean and on the coasts, and the increased efficiency of the exploitation of natural resources of the ocean. Thus it is impossible to consider the economy of the world ocean separately from the coastal economy, where the social and industrial infrastructure for the economic assimilation of ocean and sea water areas is also concentrated.

The largest "strips" of economic assimilation of the earth's surface are located in the PKhKZ. Previously, many of them were formed mainly as a result of the assimilation of new territories. Now these centers have especially favorable conditions for the assimilation of the ocean. The PKhKZ is the main element of the outwardly centered systems--the ocean and sea economic regions of the world ocean.

The contact zone of "dry land--ocean" is a complex natural system which is one of the main ecological filters of the earth. The natural processes that take place in it play an essential role in the global system of energy exchange and the circulation of substances in the biosphere. Additionally, the PKhKZ is more sensitive and vulnerable to external influence as a result of economic activity. Being the largest accumulator of the industrial and domestic wastes of mankind, the PKhKZ is becoming a major outpost in the struggle against pollution of the oceans and seas.

The conflict between economic and ecological interests is especially critical in the PKhKZ. Therefore, for example, plans for regulating the river flow, territorial redistribution of water resources and the transformation of river systems must be coordinated with the ecological consequences of these measures in the PKhKZ. In capitalist countries the PKhKZ is an arena of the critical struggle between private and public interests and various forms of utilization of coastal territories.

The problems of the development of industry, transportation and agriculture, the protection of nature and the combination of built-up and recreational areas require a comprehensive approach to the development of the PKhKZ. It is no accident that certain coastal countries are developing programs for the utilization of the resources of the "dry land-ocean" PKhKZ. The United States has enacted a law for controlling the coastal territory; life raises the problem of the three big E's: economics, energy and ecology (environment). A definition of the concept of the "coastal zone" has been given. The coastal zone is a zone with the greatest concentration of maritime jobs; the spaces that are located along the coast are unique areas in the physical-

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geographical, ecological, industrial and socio-economic senses [20]. The Coastal Society of the United States was instituted in 1975. It defines the coastal environment as an invaluable and nonrestorable natural wealth, the source of industrial raw material energy as well as food products, and a place of recreation for millions of people [3, 31].

The natural and economic contact zone of the seas of the USSR have no analog on earth. Its basic parameters: the length of the coastline, taking into account islands--111,000 kilometers; the area of the continental shelf is more than 6 million square kilometers, including 3.4 million square kilometers with depths of less than 50 meters; the number of people living in seaside cities is more than 20 million.

Modern maritime economic centers are located on the periphery of contact zones of the corresponding sea regions near the intersection of sea and dry-land state borders of the country (Leningrad, Odessa, Murmansk, Baku and Vladivostok). This is brought about by a number of factors: the country's foreign economic ties (maritime trade), foreign economic functions (the interests of the country's defense capabilities), and the assimilation of biological (fish) resources of the world ocean. Each of the aforementioned centers has port city satellites that perform one of the "maritime" functions of the large city: Kronshtadt, Il'ichevsk, Severomorsk, Neftyanoye Kamni and Nakhodka.

The economic assimilation of the seas takes place simultaneously with the process of attracting population to the coasts. The population of coastal cities increased by 46 percent during the period from 1960 through 1975. Large cities on seacoasts, which are characterized by preferential development, are the "nuclei" of the port industrial complexes that are being formed.

At the present time the country's national economic five-year plan envisions the development of a number of the most important territorial production complexes in continental regions. And this is predictable because the USSR is the largest power in the world. In our opinion, in the future, because of the extensive utilization of fuel, energy, biological, energy and chemical resources of the seas and oceans, a considerable proportion of capital investments will be directed toward the assimilation of the PKhKZ of the country's seas and the most important territorial production combinations (strips of development) will include port industrial complexes. In essence many maritime centers will begin to be "reborn" as a result of their presently concealed potential of their economic and geographical positions. As a result of the enlistment of the natural resources of the seas and oceans in large-scale production, there will be preferential development of port industrial complexes along with territorial industrial complexes. The former will play an essential role in increasing the efficiency of public production as a result of more efficient spatial organization of the country's maritime economy from a national economic standpoint.

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The need for coordination of economic activity in the country's seas raises the problem of economic regioning of the seas (taking into account the ecological condition of the national environment) and efficient organization (zoning) of the PKhKZ: the singling out of industrial, built-up, recreational, industrial, biological improved and preserve and research zones.

In conclusion, one should emphasize that the "dry land-ocean" PKhKZ should become the subject of comprehensive scientific research. A leading role in this will be played by geography, which studies the spatial, natural and economic systems.

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